DOCUMENT RESUME

ED 214 242 EA 014 464

AUTHOR Wasson, Avtar S.; Dionne, Jean-Paul
TITLE Relationships between Stimulus-Seeking, School Climate and Self-Reported Deviant Behavior in High Schools.
PUB DATE Mar 82
NOTE 26p.; Paper presented at the Annual Meeting of the American Educational Research Association (New York, NY, March 19-23, 1982).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Antisocial Behavior; Discipline; *Educational Environment; Foreign Countries; High Schools; Individual Development; *Novelty (Stimulus Dimension); School Surveys; *Stimulation; Student Attitudes; *Student Behavior; Student Development; Student School Relationship
IDENTIFIERS Ontario; *Stimulus Seeking Behavior

ABSTRACT

The interactions among student personality, school climate, and socially deviant behavior were examined by means of a survey of 483 high school students in three rural schools in eastern Ontario (Canada). Data were gathered on students' stimulus-seeking behavior, their self-reported deviant behavior in school, and their perceptions of whether the school's climate facilitated self-development and growth and of whether it pressed for stability and bureaucratic control. The survey instruments included M. Zuckerman's Sensation-Seeking Scale, G. G. Stern's Elementary and Secondary School Environment Index, and a school deviant behavior scale developed by the authors. Examination of the survey responses using analysis of variance and regression analysis indicated that high stimulus-seekers engaged in more deviant school behavior than did low stimulus-seekers, no matter what the school climate. However, they did so less often when they perceived the school climate to facilitate self-development. Perception of school climate as high on control pressure did not have a highly significant effect on the relationship between stimulus-seeking and deviant school behavior. (Author/RW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED214242

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

A.S. WASSON

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

RELATIONSHIPS BETWEEN STIMULUS-SEEKING, SCHOOL CLIMATE AND SELF-REPORTED DEVIANT BEHAVIOR IN HIGH SCHOOLS

Avtar S. Wasson*
Training Directorate
Employment & Immigration Canada

and

Jean-Paul Dionne
Faculty of Education
University of Ottawa

EA 014 464

* Communications address: A.S. Wasson
R.R. #1, Limoges, Ontario, Canada, K0A 2M0

Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY, March 19-23, 1982.

INTRODUCTION

This paper presents the findings of an investigation on deviant behavior in high schools. The perspective adopted here treats self-reported deviant behavior as a function of school climate and psychological characteristics. More specifically, Farley's theory of delinquency is applied to self-reported school deviant behavior and school climate. Farley (1973) postulates that delinquent behavior is a function of the interaction of the stimulus-seeking motive, a psychological characteristic of the individual, and the environment.

CONCEPTUAL FRAMEWORK

Stimulus-seeking motive

The concept of stimulus-seeking or sensation-seeking is characterized as a generalized tendency to seek "varied, novel and complex sensations and experiences" (Zuckerman, 1979, p. 11). Zuckerman explains further that: "varied" reflects the need for change; "novel" means something unlike previous experiences in some respects, if not all; and "complexity" refers to the number of stimulus elements and their arrangement. The high sensation seekers require relatively novel and stimulating situations and like to explore them. The low sensation-seekers display the opposite characteristics.

The concept of "fun" or "excitement seeking" as one of the personality traits of delinquents appears in the delinquency literature fairly often (e.g. Cohen, 1955; Miller, 1958; and others summarized by Csikszentmihalyi & Larson, 1978). The sensation-seeking trait has been studied independently of Eysenck by Zuckerman and his associates (1964). Zuckerman et al. (1964) constructed a paper-and-pencil scale, the Sensation-seeking Scale (SSS). Essentially, the SSS measures individual differences in the degree to which a person seeks out varied, novel, or complex experiences and sensations. Farley and Farley (1970) and, more recently, Eysenck and Zuckerman (1978) found significant correlations between SSS and Eyzenck's extraversion and psychoticism scales. Zuckerman (1979) observed correlations ranging from 0.12 to 0.58.

Based on the work of Zuckerman (1974, 1979), Berlyne (1960), Zubek (1969), Hebb (1949) and Penney & Reinehr (1966) on sensation-seeking, Farley (1973) postulates that delinquent behavior is a function of stimulus-seeking (possibly based upon "physiological arousal"). For further discussion, see Farley (1973) and Zuckerman (1979). Farley proposed his model of stimulation-seeking (though he prefers to call it a theory) to explain delinquent behavior, defined as behavior in violation of societal norms. Farley states essentially that delinquent behavior is a function of the interaction between the stimulus-seeking motive and the environment of the individual. He measures the stimulus-seeking motive through Zuckerman's SSS, and the environment through an index of socio-economic status. A number of studies have provided empirical data in support of Farley's approach (Farley & Farley, 1970, Farley and Sewell, 1976, Farley et al. 1979, Nelson, 1976).

According to Farley (1973), high stimulation-seekers who come from environments where there is a lack of opportunity for satisfying stimulation-seeking needs in socially approved ways are more likely to engage in delinquent behavior. High stimulation-seekers, on the other hand, who come from environments which provide sufficient opportunities for satisfying their stimulation-seeking needs in socially approved ways, are more likely to engage in socially desirable behavior. Low stimulation-seekers are unlikely to engage in delinquent behavior in either situation because of their tendency to avoid too much stimulation.

The foregoing studies indicate that the stimulus-seeking motive plays an important role in explaining adolescent deviance. There is considerable evidence in the literature (Eysenck & Zuckerman, 1978; Zuckerman, 1979a) regarding the relationship between extraversion and delinquency, and between psychoticism and delinquency. Eysenck's theory, however, does not emphasize the role of environment in explaining delinquency. Stimulus-seeking, on the other hand, suggests the interaction of an individual with his environment. The sensation-seeker is sensitive to his or her internal sensations and chooses stimuli that maximizes them. According to Zuckerman, "unusual sensations may be produced by emotions, drugs, and physical activities such as free-fall skydiving, scuba diving, or other activities involving speed and movement beyond the ordinary range" (1979, p.10). In Farley's model of delinquent/deviant behavior, high stimulation-seekers are more likely to engage in deviant behavior than low stimulation-seekers. The type and degree of deviation depends on the individual's environment.

School Environment/Climate

Studies of the socio-psychological climate in the school context have generally focussed on the relationships between academic achievement or attitudes towards an academic subject and various dimensions of the socio-psychological climate (O'Reilly, 1975, 1980; Walberg, 1976). There has been hardly any study of the various dimensions of school or classroom climate and school deviant behavior.

The focus of the present investigation is the school climate and Stern's conception was adopted. Incidentally, Stern was one of the

first researchers to develop indices of organizational climate including that of school based upon the theoretical work of Murray (1938).

Stern's model of school climate is a need-press model of behavior. Needs are defined as "organizational tendencies which appear to give unity and direction to a person's behavior (Stern, 1970, p. 6). Press refers to an "external situational counterpart to the internalized personality needs" (Stern, 1970, pp. 6-7), and is considered as complementary, not necessarily reciprocal, to the corresponding need. It refers to the phenomenological world of the individual, the unique and inevitably private view each person has of the events in which he partakes.

Stern developed an activities index consisting of 30 scales, reflecting the 30 personality needs identified by Murray. Later on, Stern applied this index to various organizations including schools. Factor analysis of these thirty scales resulted in approximately six factors: intellectual climate, achievement standards, practicalness, supportiveness, orderliness and impulse control which reduce to the two categories: Development Press and Control Press. The Development Press consisted of the first four factors and the Control Press of the last two factors. According to Stern (1970, p. 68), the Development Press describes a variety of presses for facilitating growth and self-enhancement, and Control Press reflects stability and bureaucratic maintenance. The Control Press also refers to limited opportunities for personal expression. Stern's conceptualization of school climate into Development Press and Control Press resembles somewhat the other

conceptualizations of school climate, such as "open vs. traditional" and "custodial vs. humanistic oriented" (see Hoy & Miskel, 1978, chapter on organizational climates). The "open", "development" and "humanistic" type of climate focusses on pupil participation in various school activities and emphasizes individual development, among other things. On the other hand, the "closed", "control" and "custodial" type of climate emphasizes an authoritarian type of atmosphere, such as enforcement of rules.

The various indices of school climate based on Lewin and Murray's conceptualizations have been related to areas such as academic achievement or attitudes towards various academic subjects, such as mathematics (e.g. O'Reilly, 1976, 1980; Walberg, 1976; Marjoribanks, 1978) but not to deviant/delinquent behavior in the school.

Csikszentmihalyi and Larson (1978) contend that the inability of schools to "provide engaging action systems help to create bored, frustrated and dissatisfied people" (p. 330). Students seek alternate structures of challenges to obtain experiences. Since the pupils lack opportunities for enjoyable experiences through school this lack of challenge might lead students to engage in deviant behavior (Csikszentmihalyi & Larson, 1978; Csikszentmihalyi, et al., 1977). Despite the significant theoretical contribution of Csikszentmihalyi and associates, they have not reported much empirical evidence in support of their contention. However, some empirical evidence in support of the relationship between boredom and school misconduct has been provided by Robinson (1975).

The measures of social class, or socio-economic status, are distant indicators of environment and are considered inappropriate for the purposes of the present study.

Thomas and associates (1977) have conducted a study in which a measure of self-reported delinquency was related to perceived measures of school organization such as the use of coercive power. These researchers studied a sample of 923 students from three public high schools in a metropolitan area of the U.S. The data on all independent as well as dependent variables were supplied by the students. These investigators found that, in attempting to assure social control, schools exercise coercive power to obtain reluctant involvement among the students. This in turn increases the probability of delinquent involvement among the pupils. This study provides an interesting finding, that is, when schools are perceived as custodial or control-oriented (i.e. use coercive power), alienative tendencies were evoked among the pupils. These alienative tendencies, the authors contend, could lead to delinquent involvement. To be alienated in school implies to be less involved in school. Social control theorists of delinquency such as Hirschi (1969), and Hindelang (1973), emphasize (and have empirical evidence to support) that the weakening of ties with conventional social institutions such as school can lead to deviant behavior.

Jessor and Jessor (1977) have recently reported the results of a longitudinal study of problem behavior (deviant behavior in general and not in the context of the school) among adolescents (high school

group, N=432). Jessor and Jessor used measures of perceived environment. In accord with their prediction, Jessor and Jessor found that the proximal environmental measures accounted for greater variance than distal environmental measures in the explanation of problem behavior.

Statement of the problem and hypotheses

Human behavior is conceptualized as resulting from an interaction of a person and his/her environment. This Lewinian notion of behavior leads to define deviant behavior in schools as a function of the interaction of pupils in schools and their school environment or climate. Kulka, Klingel and Mann (1980) and Farley (1973) have somewhat similar model of person-environment to explain school crime and delinquent behavior, respectively.

Farley measures stimulation-seeking through the Sensation-seeking Scale (SSS), developed by Zuckerman, and environmental opportunities through an index of socio-economic status (SES). The basic expectation from Farley's theory is that high stimulus-seekers who come from environments with limited opportunities for canalizing stimulation-seeking needs in a scoially-approved fashion are more likely to engage in delinquent behavior than high stimulus-seekers who come from environments rich in opportunities. Low stimulation-seekers are unlikely to engage in delinquent behavior in either type of environment, perhaps because they can satisfy their needs without seeking much stimulation within their environment.

There appears to be two limitations to applying Farley's model in the school context. One is his definition of deviant behavior, that is, violation of societal norms (e.g. Criminal Code), and the second is his use of SES, an indirect measure of environment. An adaptation of Farley's model remains feasible. One modification of Farley's theory was to extend his definition of delinquency to school deviant behavior as both delinquent and school deviant behavior are subjects of deviant behavior. The school deviant behavior was measured through the self-report method. The self-report measures of deviant behavior have been shown to be reliable and valid (Kulka et al., 1980; Hindelang et al., 1979; Singh, 1979; Wasson, 1981).

Another modification to Farley's theory was with regards to the measurement of the environment variable. Jessor and Jessor have argued that:

> Logically, the perceived environment is the one that has the most invariant relationship with behavior since it is the environemnt of immediate meaning to which the actor is responding. (1977, p. 27)

Existing theoretical and empirical evidence (Jessor & Jessor, 1973, 1977) indicates that measures of the perceived environment account for more variance in deviant behavior than indirect objective measures such as the socio-economic status.

Stern conceptualizes school climate in terms of expression of needs and opportunities. He has developed his model on the Lewinian principle that behavior is a function of the interaction of the person and his environment. Farley's model subsumes this concept.

With the proposed adaptation of Farley's model the following research hypotheses can be postulated:

1. High stimulus-seekers are more likely to engage in school deviant behavior than low stimulus-seekers.

2. High stimulus-seekers who perceive their school climate as high on the Development Press are less likely to engage in school deviant behavior than those who score low on the Development Press.

3. High stimulus-seekers who perceive the school climate as low on the Development Press and high on the Control Press are more likely to engage in school deviant behavior than those who perceive the school climate as high on the Development Press and low on the Control Press.

METHODOLOGY

Population and Sample

The target population consists of High School students in rural Eastern Ontario, from which a nearly random sample of 489 students (216 males, 272 females and one non identified) was selected. The average number of students per class was 21.95 (S.D., 6.17) with an average age of 16.03 (S.D., 1.16). The distribution of subjects according to grade is as follows: 84 (17.4%) from grade nine; 135 (28.0%) from grade 10; 157 (32.5%) from grade 11; 103 (21.3%) from grade 12; 4 (0.8%) from grade 13.

Instruments

The Sensation-Seeking Scale (SSS), originally developed by Zuckerman and associates (1964), positions individuals on the sensation-seeking continuum. The latest version (form V) has 40 forced-choice type of items and has four subscales: Thrill and Adventure Seeking, Experience Seeking, Disinhibition and Boredom Susceptibility. The reliability coefficeints range from 0.83 to 0.94 while the validity coefficients fall in the range of 0.4 to 0.6 (Zuckerman, 1979).

Stern (1970) developed a series of indices to measure the socio-psychological climate of organizations, including schools. These indices are based on the need-press paradigm of human behavior proposed by Murray (1938). The Elementary and Secondary School Environment Index (ESI) is a short version of the High School Characteristics Index. It consists of 61 items. There are seven first-order factors and two second-order factors. The first order factors are Intellectual Climate, Expressiveness, Group Social Life, Personal Dignity, Achievement Standards, Orderliness and Peer Group Dominance. The two second-order factors are: Development Press and Control Press. The Development Press describes a variety of environmental variables that facilitate human growth. The Control Press focuses on organizational maintenance and stability. The reliability coefficients are in the range of 0.71 to 0.89.

The School Deviant Behavior (SDB) was developed specifically for this study by the authors to measure self-reported school deviant behavior in high schools. It consists of 29 activities with four response categories: never, once or twice, three or four times, five times or more. An internal consistency alpha coefficient of 0.88 was attained.

In developing the self-reported school deviant behavior scale, existing instruments on anti-social behavior and delinquency were examined. In addition, the Education Act of Ontario, regulation of School Boards, Gallup poll studies were consulted. To be selected, items were required to be descriptive of activities which take place in the school environment. Some items were modified to reflect the Canadian situation. A preliminary version of the instrument was submitted to a panel of judges. Then, after revision, it was field tested with 242 high school students (Wasson, 1981).

The research instruments were completed anonymously to insure confidentiality and increase response freedom. The questionnaires were administered to all students within a classroom by their teacher or, exceptionally, by the researchers. Subjects completed the questionnaires in the following order: SSS, ESI ans SDB. Special care was exercised to minimize disruption of school activities.

PRESENTATION AND DISCUSSION OF RESULTS

A brief description of the observed characteristics is followed by a regression analysis of the Stimulus-Seeking, Control Press and Development Press variables on Self-Reported School Deviant Behavior (SDB). Using a median split on the independent variables, 8 subgroups are formed. The mean SDB of these subgroups are compared with an analysis of variance technique. Further discussion on the data is also provided.

The average sensation-seeking score was 19.32. This is comparable to values reported by Zuckerman (1975). The correlation between Sensation-

Seeking (SSS) and School Deviant Behavior (SDB) is 0.53 (p 0.01). This indicates that high stimulus-seekers tend to engage more often in deviant behavior in school than low stimulus-seekers.

There is a low negative relationship (r = -0.21) between the Control Press and deviant behavior. A similar relationship (r = -0.26) is observed between the Development Press and deviant behavior. In other words, these correlations suggest that students who perceive the school climate as low on Control Press, or as low on Development orientation, tend to engage more frequently in deviant behavior at school.

The results of the present study are comparable with those of Richman & Stern (1979, p. 14) on Control Press; M = 3.98, S.D. = 1.79 in the present sample and M = 4.10, S.D. = 2.10 for Richman and Stern. They do differ, however, on Development Press; M = 22.20, S.D. = 8.22 in the present sample compared to M = 31.84, S.D. = 8.90 for Richman and Stern. These differences also extend to all the factors of the development Press. This discrepancy could be attributed to differences among two populations, for instance, it is possible that the school climate reflects the social climate. If so, the 20 years span between the two studies may account, atleast partially, for these observed differences.

A stepwise multiple regression analysis was conducted with the computer program BMDP2R. This program provides both forward and backward regression analyses. The independent variables included in the analysis were: Sensation-Seeking (SSS), Development Press (DP), Control Press (CP), and their interactions. The dependent variable was Deviant Behavior in School (SDB). A summary of this analysis is presented in Table 1.

The results indicate that the stimulus-seeking personality variable accounted for substantial variance (28%); the total variance explained was 33%. It should be noted that the interaction SSS X CP X DP added only 5% to the explained variance.

Insert Table 1 about here

To further study the interaction, extreme groups were formed using median scores as cut-off points for the three predictor variables: Sensation-Seeking (SSS), Development Press (DP), and Control Press (CP). This procedure gave rise to eight groups of subjects, which are described in Table 2, together with their Self-Reported School Deviant Behavior (SDB) characteristics.

Insert Table 2 about here

One observes that high SSS in low CP and low DP engaged more often in deviant behavior than in any other combination of school climate. As expected from the first hypothesis, high SSS have reported they engage more often in School Deviant Behavior. The high F-value ($F = 111.904$, $p = 0.000$) from the ANOVA Summary, in Table 2, confirms the statement of this hypothesis.

It was also anticipated, in the third hypothesis, that high SSS, low on DP and high on CP, would engage more frequently in School Deviant Behavior than high SSS, high on DP and low on CP. This expectation was not confirmed. As observed in Table 2, the difference between these two means was very small (45.88-45.27 = 0.61).

From hypothesis 2, one should observe less school deviant behavior from high SSS, high on DP, than from high SSS, low on DP. From the means of the concerned groups, in Table 2, this hypothesis is supported. The DP main effect ($F = 12.896$, $p = 0.000$) also lends support for the hypothesis. One should,however,exercise some caution in this generalization for the interaction SSS X DP X CP is significant ($F = 4.533$, $p = 0.034$).

To gain more insight into school deviant behavior, groups low, medium and high on the Stimulus-Seeking, Control Pess and Development Press variables were formed. The 33rd and the 6th percentile were used as cut-off points in each case. The descriptive statistics on school deviant behavior, for the resulting 27 groups, are presented in Table 3.

- -

Insert Table 3 about here

- -

One notes that high stimulus-seekers engage more frequently in deviant behavior than low stimulus-seekers . irrespective of how they

perceive the school climate. The variance for high stimulus-seekers is higher than that of other groups. It is also seen, from this table, that when the Development-Press is perceived as high in the school the high SSS engage less often in deviant behavior. Also, generally for the low Control Press type of perceived school climate the high SSS engaged more often in deviant behavior.

DISCUSSION AND CONCLUSIONS

The objective of the study was to examine the effects of the stimulus-seeking motive and the school climate on the self-reported deviant behavior of high school students. In doing so, it provided both an extension and a test of Farley's theory of delinquency.

The results of the analysis of data indicated that high stimulus-seekers engaged more frequently in deviant behavior than low stimulus-seekers, irrespective of the school climate. This finding is consistent with prior research (Farley, 1973; Farley & Farley, 1972) Farley & Sewell, 1976; Farley et al. 1979; Nelson, 1976).

It was found through regression analysis, that the psychological characteristic, stimulus-seeking motive, accounts for a substantial amount of explained variance in the school deviant behavior. This finding is consistent with the research of Jessor and Jessor (1977), who investigated the effects of personality and environmental variables on problem behavior - a different term used for deviant behavior. Jessor and Jessor used different measures of personality and environment. In addition, their study focussed on problem behavior and not school

deviant behavior, the focus of the present study. Unfortunately, Jessor and Jessor did not study the interaction effects of the personality and environmental variables on the problem behavior. In addition, Jessor and Jessor (1979) do not report a summary of results from the numerous multiple regression analyses.

The overall interaction was statistically significant. It was expected that in an environment high on Development Press (DP) and low on Control Press (CP) high Stimulus-Seekers (SSS) would engage in deviant behavior less often than in other types of environment. The data partially support this postulation. It was expected that high stimulus-seekers would engage in deviant dehavior more frequently when the school environment is high on the Control Press. This, however, was not the case as revealed by the present data.

A plausible reason for this finding is that the high stimulation-seekers do perceive Control Press as a deterrent factor, that is, the penalties are perceived as real and not worth the risk. In addition, it is also possible that violation of school regulations (Control Press) may not be considered a novel situation.

It is also possible that the Stern's school climate index does not adequately measure the Development and Control Press in the present School context as well as in the 1960's. Some support for this contention comes from a factor analysis, conducted by one of the authors (Wasson, 1982) on the Stern's School Environment Index, which revealed a different factor structure. Perhaps, other measures of school climate are nowadays more appropriate.

A practical implication for educators is that in attempts to control deviant behavior in high schools the effort could be focused on a subgroup of high stimulation-seekers, especially those who do not perceive the school climate as meeting their needs. Providing opportunities in the school environment would channel the needs of high stimulation seekers towards socially approved behaviors. As to what shape or kind of activities that may be involved should be investigated further.

BIBLIOGRAPHY

Berlyne, D.E., Conflict, Arousal and Curiosity, New York: McGraw-Hill, 1960.

Broder, Paul K., Dunivant, N., Smith, E.C. & Sutton, L.P., Further observations on the link between learning disability and juvenile delinquency, Journal of Educational Psychology, 1981, 73, 838-850.

Cohen, A., Delinquent Boys, New York: Free Press, 1955.

Csikszentmihalyi, M., & Larson, R., Intrinsic Rewards in school crime, Crime and Delinquency, 1978, 41, 322-335.

Csikszentmihalyi, M. Larson, R., & Prescott, S., The Ecology and Adolescent Activities and Experience, Journal of Youth and Adolescence, 1977, 6, 281-194.

Eysenck, S., & Zuckerman, M., The Relationship between Sensation-Seeking and Eysenck's Dimensions of Personality, British Journal of Psychology, 1978, 69, 483-487.

Farley, F.H., A Theory of Delinquency, Paper presented at the American Psychological Association Annual Meeting, Montreal, August 1973.

Farley, F.H. & Farley, S.V., Impulsiveness, Sociability, and the Preference for Varied Experience, Perceptual and Motor Skills, 1970, 31, 47-50.

Farley, F.H., & Farley, S.V., Stimulus-Seeking Motivation and Delinquent Behavior among Institutionalized Delinquent Girls, Journal of Consulting and Clinical Psychology, 1972, 39, 94-97.

Farley, F.H., & Sewell, T., Test of an Arousal Theory of Delinquency, Criminal Justice and Behavior, 1976, 3, 315-320.

Farley, F.H., Steinberger, H., Cohen, A., & Barr, H.L., "Delinquent" Behavior among Institutionalized Drug Addicts as a Function of Arousal and the Sensation-Seeking Motive, Criminal Justice and Behavior, 1979, 6, 41-48.

Hebb, D.O., The Organization of Behavior, New York: Wiley, 1949.

Hoy, W.K., & Miskel, C.G. Educational Administration, New York: Random House, 1978.

Jessor, R., & Jessor, S.L., the Perceived Environment in Behavioral Science: Some Conceptual Issues and Some Illustrative Data, American Behavioral Scientist, 1973, 16, 801-828.

Jessor, R., & Jessor, S., Problem Behavior and Psychosocial Development, New York: Academic Press, 1977.

Kulka, R.A., Klingel, D.M., & Mann, D.W., School Crime and Disruption as a Function of Student-School fit: An Empirical Assessment, Journal of Youth and Adolescence,1980, 9(4), pp. 353-370.

Miller, W.B., Lower Class Culture as a Generating Milieu of Gang Delinquency, Journal of Social Issues, 1958, 14, 5-19.

Murray, H., Explorations in Personality, New York: Oxford Univer. Press, 1938.

Nelson, J., Creativity and Delinquency as a Function of Physiological Arousal and the Stimulus-Seeking Motive, Unpublished Ph.D. thesis, Univer. of Wisconsin, Madison, 1976.

O'Reilly, R.R., Classroom Climates and Achievement in Secondary School Mathematics classes, Alberta Journal of Educational Research, 1975, 21, 241-248.

O'Reilly, R.R., Attitudes of Secondary Students Concerning the Nature of Mathematics, Mathematics Teaching and Learning Related to Achievement, Canadian Journal of Education, 1980, 5, 76-86.

Penney, R.K. & Reinher, R.C., Development of a Stimulus-Variation Seeking Scale for Adults, Psychological Reports, 1966, 18, 631-638.

Richman, J., & Stern, G., Stern Personality and Environment Indexes: A User's Manual, Elementary and Secondary SChool Index and High School Characteristics Index, New York, 1979.

Robinson, W.P. Boredom at School, British Journal of Educational Psychology, 1975, 45, 141-152.

Stern, G.G., People in Context, New York: Wiley, 1970.

Thomas, C., Kreps, G., & Cage, R., An Application of Compliance Theory to the Study of Juvenile Delinquency, Sociology and Social Research, 1977, 61, 156-175.

Walberg, H.J., Psychology of Learning Environments: Behavioral, Structural, or perceptual? In L.S. Shulman, R.J. Griffore & S. Mowry (Eds.) Review of Research in Education, (Vol. 4), Ithaca, Ill., F.E. Peacock, 1977, pp. 142-178.

Wasson, A.S., Extroversion, Introversion and School Deviant Behavior, Paper presented at the Annual Meeting of American Educational Research Association, Los Angeles, April, 1981.

Zubek, J.P. (Ed.), Sensory Deprivation: Fifteen Years of Research, New York: Appleton-Century-Crofts, 1969.

Zuckerman, M., The Sensation-Seeking Motive, in B. Maher (Ed.) Progress in Experimental Presonality Research, (Vol. 7), New York: Academic Press, 1974, pp. 70-148.

Zuckerman, M., Sensation Seeking, Hillsdale, N.J.: Lawrence, Erlbaum, 1979.

Zuckerman, M., Kolin, E.A., Price, L., & Zoob, I., Development of the Sensation-Seeking Scale, Journal of Consulting Psychology, 1964, 28, 477-482.

Table 1

Summary of the Stepwise Multiple Regression Analysis (N=483).

Variable	Multiple R	RSQ	Increase in RSQ	Simple R	Standardized Beta
SSS	0.5298	0.2807	0.2807	0.530	0.593
SSS X CP X DP	0.5772	0.3308	0.0501	-0.071	-0.233

Note: The order of the variables entered in the analysis corresponds to the one shown in the table

Standard options with the program BMDP2R were used.

Table 2

ANOVA summary for subgroups of students characterized by median split on the variables SSS, Development Press and Control Press.

GROUP DESCRIPTION					
Stimulus-Seeking	Dev. Press	Control Press	N	Mean	SD
Low	Low	Low	55	38.58	5.96
Low	Low	High	50	39.22	7.60
Low	High	Low	41	38.85	6.49
Low	High	High	100	36.04	5.13
High	Low	Low	76	52.14	13.80
High	Low	High	52	45.27	9.10
High	High	Low	32	45.88	8.74
High	High	High	77	42.71	8.98

ANOVA SUMMARY					
Source of variation	SSS	DF	MS	F	P-prob.
SSS	8,498.352	1	8,498.352	111.904	.000
Dev. Press	979.365	1	979.365	12.896	.000
Control Press	1,165.198	1	1,165.198	15.343	.000
SSS X DP	154.012	1	154.012	2.028	.155
SSS X CP	457.275	1	457.275	6.021	.014
DP X CP	0.031	1	0.031	0.000	.984
SSS X DP X CP	344.250	1	344.250	4.533	.034
Residual	36,072.891	475	75.943		
Total	49,947.543	482	103.626		

Table 3

Means and standard deviations of deviant behavior in schools for subgroups low, medium and high on stimulus-seeking, control press and development press.

Control Press	Development Press	Stimulus-Seeking (SSS)								
		Low			Medium			High		
		N	M	SD	N	M	SD	N	M	SD
Low	Low	11	37.18	4.69	18	44.17	7.91	25	55.63	13.17
	Medium	15	36.40	4.39	12	39.17	4.95	11	58.56	12.63
	High	3	35.00	4.00	4	40.75	6.70	4	53.45	14.31
Medium	Low	21	37.81	6.10	29	45.10	8.73	32	48.78	14.57
	Medium	31	37.06	4.75	16	44.06	9.26	20	41.00	11.46
	High	20	36.75	4.90	19	42.53	7.87	13	45.15	7.28
High	Low	10	36.10	2.85	9	41.78	6.55	12	46.08	10.92
	Medium	12	37.00	7.51	20	42.75	8.10	12	47.75	9.74
	High	39	35.36	5.26	37	36.95	5.42	28	45.21	7.96